Center Of Excellence For Airport Technology An Overview

Barry J. Dempsey, COE Director

Abstract

The FAA Center of Excellence for Airport Technology, located at the University of Illinois at Urbana-Champaign (UIUC) with an affiliate at Northwestern University, Chicago. Illinois, envisions a strong working partnership with the Federal Aviation Administration. The Center's initial focus on advances in airport pavement research has been continued, and expanded to include research into airport wildlife hazard mitigation. In the area of airport pavements, the Center has continued to support the FAA's National Airport Pavement Test Facility. This is an extremely important program that has both national and international impact on future commercial aviation activities. In addition, other COE research projects will benefit the FAA as it develops new advanced pavement design procedures for next generation aircraft. The assembled research team is experienced in conducting basic research in airport pavement technology, including modeling of airport pavement structures, constitutive behavior of pavement materials, material characterizations, and advancement in the art of pavement evaluation. In the area of wildlife strike mitigation, the Center has established a team of experts to conduct research, composed of faculty members with experience in wildlife habitat management, wildlife ecology, Geographic Information System, radar applications and statistics.

Considerable progress is being made in the COE research programs, as evidenced by the large number of technical papers and reports derived from the research studies that have been published. Papers have been presented at well-known conferences and meetings, including the FAA Worldwide Airport Technology Transfer Conferences in 1999 and 2002, ASCE Airfield Pavement Conferences in Seattle (1997) and Chicago (2001), and TRB Annual Meetings in Washington, DC. Other papers have been published in the ASCE *Journal of Engineering Mechanics* and ASCE *Journal of Transportation Engineering*, and in such diversified publications as the Proceedings for the SPIE Conference on Aging Aircraft and Airports and the *Journal of the Acoustical Society of America*.